

III. REMARKS

A. Brief Summary of the Pending Claims

When the Office action was issued, claims 1-19 were pending in the application. The Office action rejected each of the pending claims under 35 U.S.C. § 102(b).

The above amendments cancel claims 1-19 and add new claims 20-29. Thus, after the above amendments are entered, claims 20-29 will be pending in the application.

B. Information Disclosure Statement of May 29, 2001

An Information Disclosure Statement ("IDS") was submitted in this application on May 29, 2001. The Office action did not return an initialed copy of the list of references from this IDS to indicate that each of the references have been considered. Corrective action or clarification is hereby requested.

C. New Claims 20-29

New claims 20-29 have been added in the above amendment.

The system described in the present application differs over prior art systems for controlling implement movement. The prior art systems teach reducing the rotational speed of the implement gradually to a speed of zero before the implement reaches a mechanical stop that should prevent further rotation. The present invention permits the implement to rotate to and beyond the position where it should contact the mechanical stop, then stops further rotation. Operators feel this is advantageous because the contact of the implement with the mechanical stop is a feedback mechanism that gives the operator some information about the position of the implement. A prior art system which stops rotation of the implement before it reaches the mechanical stop would not provide this feedback. Also, operators desire the implement to approach the stop position while maintaining an adequate rate of rotation. The present invention fulfills these needs while still preventing the implement from contacting the boom which would result in damage.

Claim 20 is an independent claim, and claims 21 and 22 depend from claim 20. Claim 20 recites:

rotating the implement in the first direction under the force of the hydraulic fluid to an angular position beyond the first angular position; and
overriding an operator input commanding continued rotation of the implement in the first direction by producing a valve signal to close the valve and stop the rotation of the implement.

Claim 20 defines over the prior art of record, including U.S. Patent No. 5,701,793 to Gardner et al. (“the Gardner patent”). The Gardner patent teaches stopping the bucket prior to engagement with a mechanical stop. *See* col. 5, lines 7-14 of the Gardner patent. As seen above, claim 20 recites rotating the implement to and beyond the angular position where it should contact the mechanical stop, then stopping further rotation.

Claims 21 and 22 depend from claim 20 and define over the Gardner patent for at least the same reasons. Claims 21 and 22 also include additional limitations which define over the prior art.

Claim 23 is an independent claim, and claims 24-28 depend from claim 23. Claim 23 recites:

a mechanical stop located on the first member, the second member contacting the mechanical stop at a first angular position when the second member rotates in a first direction;
wherein the ECM permits operator input to move the second member in the first direction to the first angular position and beyond by producing a valve signal to rotate the second member in the first direction; and
wherein the ECM overrides operator input to move the second member in the first direction by producing a valve signal to stop continued rotation of the second member in the first direction after the second member has moved to a second angular position beyond the first angular position in the first direction.

Thus, claim 23 defines over the prior art of record, including the Gardner patent, for reasons similar to those stated above with respect to claim 20. Dependent claims 24-28 define over the prior art for at least the same reasons as claim 23. Claims 24-28 also include additional limitations which define over the prior art.

Claim 29 is an independent claim. Claim 29 recites:

rotating the bucket in the first direction under the force of the hydraulic fluid to a second angular position beyond the first angular position; and
overriding an operator input commanding continued rotation of the bucket in the first direction by producing a valve signal to close the valve and stop the rotation of the bucket.

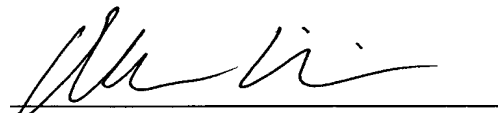
Thus, claim 29 defines over the prior art of record, including the Gardner patent, for reasons similar to those stated above with respect to claim 20.

D. Conclusion

The Office action set a shortened statutory three month period for reply expiring on March 20, 2005. A petition for a one month extension of the period for reply accompanies this response. Upon granting the Petition, the period for reply will be extended to April 20, 2005.

The fees necessitated by the petition, and all other fees, should be withdrawn from the undersigned's deposit account no. 03-1129.

Respectfully submitted,

A handwritten signature in dark ink, appearing to read "A. J. Ririe", is written over a horizontal line.

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